CLAIMS

What is claimed is:

1. A panel system for constructing a low profile enclosure comprising:

a floor assembly for enclosing the bottom of said low profile enclosure;

a pair of side wall assemblies for enclosing the left side and right side of said low profile enclosure;

a rear wall assembly for enclosing the back of said low profile enclosure;

a pivoting door assembly for enclosing and providing ingress into and egress from said low profile enclosure;

a telescoping roof assembly for enclosing the top of said low profile enclosure system and for providing ingress into and egress from said low profile enclosure;

wherein said pivoting door assembly and said telescoping roof assembly cooperate to allow walk-in access to the contents of said low profile enclosure, and wherein said low profile enclosure can be shipped in a disassembled state and assembled on a desired site.

2. The low profile enclosure panel system of claim 1 wherein said floor assembly includes;

a pair of like-configured floor panel members for constructing said floor assembly, each of said floor members having, a top surface said top surface having a means of attaching said floor assembly to said side wall assemblies, said rear wall assembly, and said door assembly, a bottom surface constructed and arranged to provide rigidity and stability to said floor assembly, a locking edge constructed and arranged with an means to connect like-configured locking edges of said like-configured floor panels into said floor assembly, a ramp edge for easy loading and unloading of said heavy duty enclosure, two closed edges for maintaining a weather resistant enclosure.

3. The low profile enclosure panel system of claim 2 wherein said means to connect like-configured locking edges includes a series of spaced apart fingers and recesses along the locking edge of each said bottom panel, each of said fingers being provided with at least one countersank aperture for receiving a fastener, said fingers and recesses constructed and arranged so that said fingers overlap and mateably engage said recesses and said fasteners secure said floor panel members together in an inter-fitting engagement with their respective top surfaces in a co-planar arrangement.

4. The low profile enclosure panel system of claim 2 wherein said floor panel members include a plurality of spaced apart tubes extending through each said floor panel under said top surface and above said bottom surface and extending between said locking edge and said ramp edge, said tubes being sized to accept floor joists thereby adding increased weight capacity and stability to said enclosure.

5. The low profile enclosure panel system of claim 2 wherein said means of attaching said wall and said door assemblies to said top surface includes a plurality of locking posts arranged in a linear fashion adjacent to said closed edges and extending upwardly from said top surface, said locking posts constructed and arranged to cooperate with said wall assemblies;

wherein said wall assemblies are secured to said floor panels via said locking posts.

6. The low profile enclosure panel system of claim 2 wherein said means of attaching said wall and said door assemblies to said top surface includes at least one hinge pin arranged adjacent to said locking posts and said ramp

edge, said hinge pin constructed and arranged to cooperate with said wall assemblies and said door assembly;

wherein said door assembly is allowed to open and close in a pivotal fashion.

7. The low profile enclosure panel system of claim 2 wherein said bottom surface includes integrally formed cross-bracing;

wherein said cross-bracing provides increased weight capacity and stability to said enclosure.

8. The low profile enclosure panel system of claim 1 wherein said left wall assembly and said right wall assembly includes two like-constructed first wall panel members and two like-constructed second wall panel members and two like-constructed third wall panel members, wherein said left wall assembly includes one of said first wall panels and one of second wall panels and one of said third wall panels and said right side wall assembly includes one of said first wall panels and one of second wall panels and one of said third wall panels.

9. The low profile enclosure panel system of claim 8 wherein said first wall panel member includes a first

longitudinal end having an attachment means constructed and arranged to cooperate with a floor assembly, a second longitudinal end having an attachment means constructed and arranged to cooperate with a roof assembly, a first horizontal edge constructed generally flat extending inwardly to a depending attachment means constructed and arranged to cooperate with a second wall panel member or a door panel member in a perpendicular relationship, and a second horizontal edge having an attachment means constructed and arranged to cooperate with a second wall panel member in a co-planar relationship.

10. The low profile enclosure panel system of claim 9 wherein said first longitudinal end attachment means includes at least one integrally formed socket and said second longitudinal end attachment means includes at least one integrally formed socket.

11. The low profile enclosure panel system of claim 9 wherein said first horizontal edge attachment means includes a semi-circular conduit extending from about the second longitudinal end toward the middle portion of said edge, said conduit having a generally circular aperture for accepting a

dowel centrally located within said middle portion end of said semi-circular conduit;

wherein said semi-circular conduit is brought into an overlapping relationship with a corresponding semi-circular conduit and a dowel pin enters said circular apertures in each conduit resulting in a mechanically secure connection between the two said panels.

12. The heavy duty enclosure panel system of claim 9 wherein said second horizontal edge attachment means includes a semi-circular conduit extending from about the first longitudinal end past the middle portion of said edge, said conduit having a generally circular aperture for accepting a dowel centrally located within said middle portion end of said semi-circular conduit;

wherein said semi-circular conduit is brought into an overlapping relationship with a corresponding semi-circular conduit and a dowel pin enters said circular apertures in each conduit resulting in a mechanically secure connection between the two said panels.

13. The low profile enclosure panel system of claim 8 wherein said second wall panel member includes a first longitudinal end having an attachment means constructed and

arranged to cooperate with a floor assembly, a second longitudinal end having an attachment means constructed and arranged to cooperate with a roof assembly, a first horizontal edge having an attachment means constructed and arranged to cooperate with a first wall panel member in a co-planar relationship, and a second horizontal edge having an attachment means constructed and arranged to cooperate with a third wall panel member in a co-planar relationship.

14. The low profile enclosure panel system of claim 13 wherein said first longitudinal end attachment means includes at least one integrally formed socket and said second longitudinal end attachment means includes at least one integrally formed socket.

15. The low profile enclosure panel system of claim 13 wherein said first horizontal edge attachment means includes a semi-circular conduit extending from about the second longitudinal end toward the middle portion of said edge, said conduit having a generally circular aperture for accepting a dowel centrally located within said middle portion end of said semi-circular conduit;

wherein said semi-circular conduit is brought into an overlapping relationship with a corresponding semi-circular

conduit and a dowel pin enters said circular apertures in each conduit resulting in a mechanically secure connection between the two said panels.

16. The heavy duty enclosure panel system of claim 13 wherein said second horizontal edge attachment means includes a semi-circular conduit extending from about the first longitudinal end past the middle portion of said edge, said conduit having a generally circular aperture for accepting a dowel centrally located within said middle portion end of said semi-circular conduit;

wherein said semi-circular conduit is brought into an overlapping relationship with a corresponding semi-circular conduit and a dowel pin enters said circular apertures in each conduit resulting in a mechanically secure connection between the two said panels.

17. The low profile enclosure panel system of claim 8 wherein said third wall panel member includes a first longitudinal end having an attachment means constructed and arranged to cooperate with a floor assembly, a second longitudinal end having an attachment means constructed and arranged to cooperate with a roof assembly, a first horizontal edge having an attachment means constructed and

arranged to cooperate with a second wall panel member in a co-planar relationship, and a second horizontal edge constructed generally flat extending inwardly to a depending attachment means constructed and arranged to cooperate with a second wall panel member or a door panel member in a perpendicular relationship.

18. The low profile enclosure panel system of claim 17 wherein said first longitudinal end attachment means includes at least one integrally formed socket and said second longitudinal end attachment means includes at least one integrally formed socket.

19. The low profile enclosure panel system of claim 17 wherein said first horizontal edge attachment means includes a semi-circular conduit extending from about the second longitudinal end toward the middle portion of said edge, said conduit having a generally circular aperture for accepting a dowel centrally located within said middle portion end of said semi-circular conduit;

wherein said semi-circular conduit is brought into an overlapping relationship with a corresponding semi-circular conduit and a dowel pin enters said circular apertures in

each conduit resulting in a mechanically secure connection between the two said panels.

20. The heavy duty enclosure panel system of claim 17 wherein said second horizontal edge attachment means includes a semi-circular conduit extending from about the first longitudinal end past the middle portion of said edge, said conduit having a generally circular aperture for accepting a dowel centrally located within said middle portion end of said semi-circular conduit;

wherein said semi-circular conduit is brought into an overlapping relationship with a corresponding semi-circular conduit and a dowel pin enters said circular apertures in each conduit resulting in a mechanically secure connection between the two said panels.

21. The low profile enclosure panel system of claim 1 wherein said rear wall assembly includes a pair of like-constructed second wall panel members.

22. The low profile enclosure panel system of claim 1 wherein said telescoping roof assembly includes a fixed roof panel, a telescoping roof panel, a left wall cap, and a right wall cap.

23. The low profile enclosure panel system of claim 22 wherein said fixed roof panel includes a top surface, a bottom surface, a front closed edge, a rear closed edge, a left closed edge, and a right closed edge, said bottom surface including a plurality of locking posts extending outwardly, said locking posts arranged in a linear fashion adjacent to said rear, left, and right closed edges, said locking posts constructed and arranged to cooperate with said sockets in said second longitudinal ends of said wall panels, wherein said fixed roof panel is secured to said wall panels via said locking posts, said upper surface including a pair of generally parallel V-shaped track grooves one of said track grooves positioned adjacent to said left closed edge and extending inward into said telescoping roof panel and one of said track grooves positioned adjacent to said right closed edge and extending inward into said telescoping roof panel, said lower surface including a pair of generally U-shaped outer track grooves one of said outer track grooves positioned adjacent to said left closed edge and extending inward into said telescoping roof panel and one of said outer track grooves positioned adjacent to said right closed edge and extending inward into said telescoping roof panel.

24. The low profile enclosure panel system of claim 22 wherein said fixed roof panel is constructed and arranged to accept at least one steel roof support for adding increased weight capacity and stability to said roof assembly of said enclosure.

25. The low profile enclosure panel system of claim 22 wherein said telescoping roof panel includes a top surface, a bottom surface, a front closed edge, a rear closed edge, a left closed edge, and a right closed edge, wherein said top surface includes a pair of integrally formed sockets, one of said top surface sockets located adjacent to said left closed edge and said rear closed edge and one of said top surface sockets located adjacent to said right closed edge and said rear closed edge, said top surface sockets constructed and arranged to cooperate with C-shaped outer track guides having integrally formed locking posts, wherein said bottom surface includes a pair of integrally formed sockets, wherein one of said bottom surface sockets is located adjacent to said left closed edge and said front closed edge and one of said bottom surface sockets is located adjacent to said right closed edge and said front closed edge, said bottom surface sockets constructed and arranged to cooperate with J-shaped inner track guides having integrally formed locking posts, wherein

said bottom surface includes a pair of generally parallel outwardly extending V-shaped guide rails, said guide rails integrally formed on said bottom surface, wherein one of said guide rails is located adjacent to said left closed edge and one of said guide rails is located adjacent to said left closed edge;

whereby said V-shaped guide rails are constructed and arranged to slidingly cooperate with said V-shaped track guides and said C-shaped outer track guides are constructed and arranged to slidingly cooperate with said U-shaped outer track grooves and said J-shaped inner track guides are constructed and arranged to slidingly cooperate with U-shaped inner track grooves located within said left and said right wall caps to allow said telescoping roof panel to telescope inwardly and outwardly with respect to said fixed roof panel.

26. The low profile enclosure panel system of claim 22 wherein said left wall cap includes an top surface, a bottom surface, an inner closed edge, and an outer closed edge, wherein said lower surface is constructed with a plurality of outwardly extending locking posts which are constructed and arranged to cooperate with integrally formed sockets located at the second longitudinal end of said wall panels, said bottom surface including an inner track groove having a

generally U-shaped cross section, said inner track groove located adjacent to and extending along said inner closed edge, said top surface including an upper track groove having a generally V-shaped cross section and extending along the longitudinal centerline of said left wall cap, wherein said inner track groove and said upper track groove are constructed and arranged to cooperate with said telescoping roof panel to allow said telescoping roof panel to telescope inwardly and outwardly with respect to said fixed roof panel.

27. The low profile enclosure panel system of claim 22 wherein said right wall cap includes an top surface, a bottom surface, an inner closed edge, and an outer closed edge, wherein said lower surface is constructed with a plurality of outwardly extending locking posts which are constructed and arranged to cooperate with integrally formed sockets located at the second longitudinal end of said wall panels, said bottom surface including an inner track groove having a generally U-shaped cross section, said inner track groove located adjacent to and extending along said inner closed edge, said top surface including an upper track groove having a generally V-shaped cross section and extending along the longitudinal centerline of said left wall cap, wherein said inner track groove and said upper track groove are

constructed and arranged to cooperate with said telescoping roof panel to allow said telescoping roof panel to telescope inwardly and outwardly with respect to said fixed roof panel.

28. The low profile enclosure panel system of claim 1 wherein said door assembly includes a left door panel including a left door header and a right door panel including a right door header, wherein said left door panel and said right door panel enclose and provide ingress into and egress out of said low profile enclosure.

29. The low profile enclosure panel system of claim 28 wherein said left door includes a first longitudinal end including a plurality of integrally formed sockets, said sockets constructed and arranged to cooperate with a hinge means, a second longitudinal end including a plurality of integrally formed sockets, a first horizontal edge having a semi-circular conduit extending from about said first longitudinal end past the middle portion of said edge, said conduit having an integrally formed hinge means, a second horizontal edge being generally flat, wherein said left door header is constructed with a plurality of outwardly extending locking posts which are constructed and arranged to cooperate

with said sockets located at said second longitudinal end of said left door panel.

30. The low profile enclosure panel system of claim 29 wherein said hinge means includes a C-shaped annular portion for accepting a hinge pin, said C-shaped annular portion constructed and arranged to cooperate with a hinge clip to close said annular portion and allow pivoting movement of said door panels, wherein said C-shaped hinge means allows said left door panel to be assembled to said enclosure without partial disassembly of other portions of said enclosure.

31. The low profile enclosure panel system of claim 28 wherein said right door includes a first longitudinal end including a plurality of integrally formed sockets, said sockets constructed and arranged to cooperate with a hinge means, a second longitudinal end including a plurality of integrally formed sockets, a first horizontal edge having a semi-circular conduit extending from about said second longitudinal end toward the middle portion of said edge, said conduit having an integrally formed hinge means, a second horizontal edge being generally flat, wherein said right door header is constructed with a plurality of outwardly extending

locking posts which are constructed and arranged to cooperate with said sockets located at said second longitudinal end of said right door panel.

32. The low profile enclosure panel system of claim 31 wherein said hinge means includes a C-shaped annular portion for accepting a hinge pin, said C-shaped annular portion constructed and arranged to cooperate with a hinge clip to close said annular portion and allow pivoting movement of said door panels, wherein said C-shaped hinge means allows said right door panel to be assembled to said enclosure without partial disassembly of other portions of said enclosure.